

ABSTRACT OF THE DISCLOSURE

An bit-plane coding pass generator is provided in which for SP-pass processing quantization coefficient of each code block divided into bit planes, “significant (S)” or “non-significant (N)” data in a predetermined area and those around the area and compared with an S/N matching pattern. The S/N matching pattern has been set when a jump can be made from an arbitrary sample point to a next sample point to be processed by SP pass. The jump is made to the next sample point to be processed by SP pass according to a jump address value obtained from a pattern coincident with a current S/N matching pattern. Thus, by reducing the time for the significant propagation (SP) pass defined in JPEG-2000, a code block can be coded at a higher speed by three coding passes.